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Gastric MALT lymphoma: a rarity

Shahid Pervez  
_Aga Khan University_

Naureen Ali  
_Aga Khan University_

Hina Aaqil  
_Aga Khan University_

Khalid Mumtaz  
_Aga Khan University_

Syed Siddiq Ullah  
_Aga Khan University_

See next page for additional authors

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Authors
Shahid Pervez, Naureen Ali, Hina Aaqil, Khalid Mumtaz, Syed Siddiq Ullah, and Nake Akhtar
Association of *Helicobacter pylori* (*H. pylori*) infection with gastric ‘Mucosa Associated Lymphoid Tissue’ (MALT) lymphomas (MALTomas) is well established. In this study the frequency and characteristics of gastric MALToma over a period of 18 years was evaluated. During this period 24 patients with gastric MALToma were diagnosed; out of them, 13 (54.2%) had active *H. pylori* infection. The mean and median age was 49.7 and 53.5 years. The male: female ratio was 17:7. The common presenting complaints were epigastric pain (n=10) and dyspepsia (n=9). Endoscopic findings revealed mild gastric hyperemia (n=16), superficial erosions (n=4) and superficial ulcers (n=4). It was concluded that the prevalence of gastric MALToma was very low in contrast to a high *H. pylori* gastritis in the Pakistani population.

**Key words:** *Helicobacter pylori*. MALToma. Lymphoma. Stomach.

The mean and median ages of patients with gastric MALToma were 49.7 years and 53.5 (ranging from 18-80 years). The male: female ratio was 17:7. Thirteen patients (54.2%) were found to have active *H. pylori* infection at the time of diagnosis. Two of these cases had a past diagnosis of active *H. pylori* associated gastritis on endoscopic biopsies which was not treated.

The presenting symptoms of the cohort included epigastric pain (n=10), dyspepsia (n=9), chronic diarrhoea (n=2), weight loss (n=2) and nausea (n=1). The endoscopic examination findings included gastric antral hyperemia, gastric antral erosion, small gastric antral superficial ulcer etc. The typical histopathologic features included extensive mucosal infiltration by centrocyte-like B-cells and lymphoepithelial lesions (Figure 1). Neoplastic cells were positive for LCA, CD20 and CD79a with low mib-1 (ki-67). The reactive population contained abundant CD3 positive T cells and in many cases well developed lymphoid follicles with germinal centers (Figure 1).

This study is the first report of its kind from Pakistan. It was found that despite the high seroprevalence of *H. pylori* infection in the Pakistani population (58.3%), the prevalence of gastric MALTomas was very low in contrast to a high *H. pylori* gastritis in the Pakistani population.
gastric carcinoma compared to well developed countries like Japan and China, despite a higher prevalence of *H. pylori* infection in the former population. *H. pylori* infection has been established to have a role in the etiology of gastric carcinoma and its paradoxical high prevalence in areas with few cases of gastric carcinoma has long puzzled researchers. Available evidence does not support difference in *H. pylori* strains as the sole explanation for this enigma. It has also been observed that patients with duodenal ulcer caused by *H. pylori*, do not develop gastric tumours, in contrast to other *H. pylori*-associated pathology, such as gastric ulcer. This illustrates variation in host responses despite infection with the same organism, and so suggests the role of genetic factors in different ethnic groups.

Thus, precisely, who will develop a neoplastic lesion associated with *H. pylori*, like MALToma, probably depends on 3 factors: the virulence of the *H. pylori* strain, types and extent of the host immune response and cofactors like diet and smoking.

In 1993 Wotherspoon and colleagues described remarkable observation of regression of MALTomas, by eradication of *H. pylori* with use of antibiotics. Response range was reported to be between 60-90%. Transformation into large B-Cell lymphoma is also possible. Most of the lesions appeared to pursue an indolent clinical course. In some cases (45.8%), no evidence of *H. pylori* infection was found. In such cases it is not clear whether the infection has been present previously and resolved at a stage after the lymphoma has attained autonomous growth or whether there is yet another unrecognized causative agent. A more detailed investigation into the epidemiologic and etiological factors in this part of the world would be invaluable in the search for the exact cause of gastric MALT lymphoma and its link to *H. pylori*.

**REFERENCES**


